# STIC SEARCH RESULTS FEEDBACK FORM

## Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact***:

**Mary Hale, Information Branch Supervisor**
**Remsen Bldg. 01 D86**
**571-272-2507**

## Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

*Types of relevant prior art found:*

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

**Comments:**

**Drop off or send completed forms to STIC-Biotech-Chem Library Remsen Bldg.**

Inventor Search

L10 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:900400 HCAPLUS
DOCUMENT NUMBER: 134:46808
TITLE: **Pharmaceutical** compositions with wound healing or anti-complementary activity comprising a dextran derivative
INVENTOR(S): Dahri-correia, Latifa; **Jozefonvicz, Jacqueline** ; Jozefowicz, Marcel; **Correia, Jose**; **Huynh, Remi**
PATENT ASSIGNEE(S): Iterfi, Fr.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000076452 | A2 | 20001221 | WO 2000-FR1658 | 20000615 |
| WO 2000076452 | A3 | 20010809 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| FR 2794976 | A1 | 20001222 | FR 1999-7636 | 19990616 |
| JP 2003501449 | T2 | 20030114 | JP 2001-502792 | 20000615 |
| US 2002183282 | A1 | 20021205 | US 2001-20044 | 20011213 |

PRIORITY APPLN. INFO.: FR 1999-7636 A 19990616
WO 2000-FR1658 W 20000615

AB The invention concerns pharmaceutical compns. with wound healing or anti-complementary activity, and their uses, said compns. comprising. (1) at least a dextran deriv. of general formula DMCaBbSuc, a, b, and c resp. representing the degrees of substitution in the groups MC, B and Su, wherein a <<geq 0.6, b = 0 or <<geq 0.1, and c = 0 or ranges widely between 0.1 and 0.5 for a wound healing compn., and a <<geq 0.3, b <<geq 0.1 and c = 0 or ranges widely between 0.1 and 0.4 for a compn. with anti-complementary activity; (2) and at least a pharmaceutically acceptable carrier, said dextran deriv. being present in a single unit dose or at a concn. adapted to the desired wound healing or anti-complementary activity. Desulfated dextrans contg. 0.43 g sulfur per 100 g were prepd. (prepn. given). Efficacy of a soln. of 50 .mu.g/mL desulfated dextran in the cutaneous wound healing of rabbits was shown.

IC ICM A61K
CC 63-6 (Pharmaceuticals)
ST pharmaceutical wound healing anticomplementary dextran deriv
IT Drug delivery systems
(aerosols; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)
IT Wound healing promoters
(cicatrizants; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)
IT Drug delivery systems
(gels, topical; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)
IT Drug delivery systems
(liposomes; pharmaceutical compns. with wound healing or

anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(microemulsions; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Stomach
(mucosa; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(nanoparticles; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(ointments, ophthalmic; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(ointments; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(oral; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(parenterals; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Wound healing
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Platelet-derived growth factors
Transforming growth factors
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(solns., oral; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Transforming growth factors
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(.beta.-; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT **62229-50-9**, Epidermal growth factor **106096-93-9**, Fibroblast growth factor 2
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT **9004-54-0**, Dextran, biological studies **9004-54-0D**, Dextran, derivs., biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT **62229-50-9**, Epidermal growth factor **106096-93-9**, Fibroblast growth factor 2
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

RN 62229-50-9 HCAPLUS
CN Epidermal growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 106096-93-9 HCAPLUS
CN Fibroblast growth factor, basic (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9004-54-0**, Dextran, biological studies **9004-54-0D**,
Dextran, derivs., biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)
RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L9 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN **106096-93-9** REGISTRY
CN Fibroblast growth factor, basic (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Astroglial growth factor 2
CN Basic astroglial growth factor
CN Basic FGF
CN Basic fibroblast growth factor
CN FGF 2
CN Fibroblast growth factor 2
CN Growth factors (animal), astroglial growth factor 2
CN Growth factors (animal), basic fibroblast growth factor
CN Heparin-binding growth factor 2
DR 164003-40-1
MF Unspecified
CI COM, MAN
SR CA
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CEN, CHEMCATS, CIN, CSCHEM, EMBASE, IMSPATENTS, IMSRESEARCH, IPA, MRCK*, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
9205 REFERENCES IN FILE CA (1907 TO DATE)
172 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9233 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN **62229-50-9** REGISTRY
CN Epidermal growth factor (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Urogastrone (8CI)
OTHER NAMES:
CN Anthelone U
CN EGF
CN Gastrone, .gamma.-uro-
CN Gastrone, uro-
CN Kutrol
CN Uroanthelone
CN Uroenterone
CN Urogastron
DR 9010-53-1, 59459-46-0
MF Unspecified
CI PMS, COM, MAN
PCT Manual registration
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, PHAR, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
17871 REFERENCES IN FILE CA (1907 TO DATE)

419 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
17906 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN **9004-54-0** REGISTRY
CN Dextran (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Dextrans (8CI)
OTHER NAMES:
CN .alpha.-Dextran
CN CDC-H
CN DEX 500
CN Dextran 1.5
CN Dextran 10
CN Dextran 1000
CN Dextran 110
CN Dextran 15
CN Dextran 150
CN Dextran 2000
CN Dextran 250
CN Dextran 3000
CN Dextran 40
CN Dextran 45
CN Dextran 500
CN Dextran 60
CN Dextran 70
CN Dextran 75
CN Dextran B 512
CN Dextran B1355
CN Dextran D 10
CN Dextran PL 1S
CN Dextran PT 25
CN Dextran PVD
CN Dextran RMI
CN Dextran T 10
CN Dextran T 110
CN Dextran T 150
CN Dextran T 20
CN Dextran T 2000
CN Dextran T 500
CN Dextran T 70
CN Dextranen
CN Dextraven
CN Eudextran
CN Expandex
CN Gentran
CN Hemodex
CN Hyscon
CN Hyskon
CN Infucoll
CN Intrader
CN Intradex
CN LMD
CN LMWD
CN Longasteril 70
CN LU 122
CN LVD

CN Macrodex
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
DR 12626-85-6, 9013-80-3, 9044-66-0, 11104-36-2, 11121-03-2, 37224-17-2, 86280-85-5
MF Unspecified
CI PMS, COM, MAN
PCT Manual registration, Polyother, Polyother only
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
13680 REFERENCES IN FILE CA (1907 TO DATE)
2376 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13699 REFERENCES IN FILE CAPLUS (1907 TO DATE)

FILE 'HCAPLUS' ENTERED AT 10:58:36 ON 11 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.


FILE COVERS 1907 - 11 Feb 2004 VOL 140 ISS 7
FILE LAST UPDATED: 10 Feb 2004 (20040210/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> d que l20
L14          652 SEA FILE=HCAPLUS ABB=ON  PLU=ON  9004-54-0D/RN(L)(BAC OR DMA
                 OR PAC OR PKT OR THU)/RL
L15         8097 SEA FILE=HCAPLUS ABB=ON  PLU=ON  WOUND HEALING+PFT,NT/CT
L16         2754 SEA FILE=HCAPLUS ABB=ON  PLU=ON  WOUND HEALING PROMOTERS+PFT/CT

L17           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 AND (L15 OR L16)
L18          238 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (9004-54-0 OR 9004-54-0D)/RN
                 (L) SULFAT?
L19            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND (L15 OR L16)
L20           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 OR L19


=> b medline
FILE 'MEDLINE' ENTERED AT 10:58:43 ON 11 FEB 2004

 FILE LAST UPDATED: 10 FEB 2004 (20040210/UP). FILE COVERS 1958 TO DATE.

 On December 14, 2003, the 2004 MeSH terms were loaded. See HELP RLOAD
 for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2004 vocabulary. See http://www.nlm.nih.gov/mesh/ and
 http:\\www.nih.gov/pubs/yechbull/nd03/nd03_mesh.html for a description
 on changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l28
L23         17075 SEA FILE=MEDLINE ABB=ON  PLU=ON  DEXTRANS+PFT,NT/CT
L24         43822 SEA FILE=MEDLINE ABB=ON  PLU=ON  WOUND HEALING+PFT,NT/CT
L26          3211 SEA FILE=MEDLINE ABB=ON  PLU=ON  L23(3A)TU
```

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L27            49 SEA FILE=MEDLINE ABB=ON  PLU=ON  L26 AND L24
L28             4 SEA FILE=MEDLINE ABB=ON  PLU=ON  L27 AND DEXTRAN(3A)(SULFAT?
                  OR DERIVATIV?)


=> b embase
FILE 'EMBASE' ENTERED AT 10:58:49 ON 11 FEB 2004
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 FILE COVERS 1974 TO 29 Jan 2004 (20040129/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l33
L29          1244 SEA FILE=EMBASE ABB=ON  PLU=ON  DEXTRAN+PFT/CT(L)(DT OR PD OR
                  PK OR DO OR AD)
L32         26624 SEA FILE=EMBASE ABB=ON  PLU=ON  WOUND HEALING+PFT/CT
L33             6 SEA FILE=EMBASE ABB=ON  PLU=ON  L29 AND L32


=> b stng
FILE 'STNGUIDE' ENTERED AT 10:58:59 ON 11 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb  6, 2004 (20040206/UP).

=> dup rem l20 l28 l33
FILE 'HCAPLUS' ENTERED AT 10:59:06 ON 11 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE 'MEDLINE' ENTERED AT 10:59:06 ON 11 FEB 2004

FILE 'EMBASE' ENTERED AT 10:59:06 ON 11 FEB 2004
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PROCESSING COMPLETED FOR L20
PROCESSING COMPLETED FOR L28
PROCESSING COMPLETED FOR L33
L37            27 DUP REM L20 L28 L33 (1 DUPLICATE REMOVED)
                  ANSWERS '1-18' FROM FILE HCAPLUS
                  ANSWERS '19-21' FROM FILE MEDLINE
                  ANSWERS '22-27' FROM FILE EMBASE

=> d l37 ibib abs ind 1-18;d bib abs 19-27

L37  ANSWER 1 OF 27  HCAPLUS  COPYRIGHT 2004 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         1996:395632  HCAPLUS
DOCUMENT NUMBER:          125:95970
TITLE:                    Heparin-like polymers derived from dextran enhance
                          colonic anastomosis resistance to leakage
```

AUTHOR(S): Meddahi, Anne; Benoit, Jacques; Ayoub, Nabil; Sezeur, Alain; Barritault, Denis
CORPORATE SOURCE: Lab. Recherche Croissance, Univ. Paris XII-Val Marne, Creteil, F94000, Fr.
SOURCE: Journal of Biomedical Materials Research (1996), 31(3), 293-297
CODEN: JBMRBG; ISSN: 0021-9304
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new tissue repair agent, RGTA11, is described for its ability to enhance colonic anastomosis repair and resistance to leakage. RGTA11 is a dextran deriv. contg. 110% carboxymethyl groups, 2.6% carboxymethyl benzylamide groups, and 36.6% carboxymethyl benzylamide sulfonate groups. RGTA11 was deemed efficient to protect the heparin-binding growth factors FGF2 against trypsin digestion. By this property RGTA11 mimicked heparin or heparan sulfate. We have also found that RGTA11 protected TGF.beta.1 against trypsin digestion while heparin did not. RGTA11 was then tested in an in vivo wound-healing model of colonic anastomosis. Our results indicate that after 48 h, TGTA11- or RGTA11/FGF-2-treated animals presented a resistance of the anastomosis to leakage which was increased two-fold ($p < 0.05$) over untreated controls. After 96 h and until day 7 there was no more difference with control animals. Our results suggest that RGTA11 presents potential clin. interest by preventing earlier leakage of colonic anastomosis.

CC 63-7 (Pharmaceuticals)
ST dextran deriv heparin colon anastomosis leakage
IT **Wound healing promoters**
(heparin-like polymers derived from dextran enhance colonic anastomosis resistance to leakage)
IT Intestine
(colon, anastomosis; heparin-like polymers derived from dextran enhance colonic anastomosis resistance to leakage)
IT **9004-54-0D**, Dextran, derivs.
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(RGTA11, heparin-like polymers derived from dextran enhance colonic anastomosis resistance to leakage)

L37 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:55397 HCAPLUS
TITLE: Macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use thereof
INVENTOR(S): Muehlradt, Peter F.; Morr, Michael
PATENT ASSIGNEE(S): GBF Gesellschaft fuer Biotechnologische Forschung MbH, Germany
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1382352 | A1 | 20040121 | EP 2002-16066 | 20020719 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
WO 2004009125 A2 20040129 WO 2003-EP7892 20030718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: EP 2002-16066 A 20020719

AB The invention discloses bisacyloxypropylcysteine conjugates R2C(O)OCH[R1C(O)OCH2]CH2SCH(NH2)C(O)YR3 (R1, R2 = fatty acid group; Y = NH, O, S, OCO; R3 = conjugate group, esp. a polymer). Conjugates of the invention include e.g. S-[2,3-bis(palmitoyloxy)-(2S)-propyl]-L-cysteinyl-carboxy-polyethylene glycol. The conjugates of the invention show good macrophage-stimulating activity and need no other solubilizers. They are useful for numerous applications, particularly for macrophage stimulation, stimulation of antibody prodn., as a defense against infection, as immunostimulants, particularly in relation to tumors, for the prevention and treatment of septic shock, for wound healing, and as adjuvants for vaccines.

IC ICM A61K047-48
CC 1-7 (Pharmacology)
Section cross-reference(s): 34
ST bisacyloxypropylcysteine polymer conjugate macrophage stimulation; immunostimulant antiinfective antitumor bisacyloxypropylcysteine polymer conjugate; wound healing vaccine adjuvant bisacyloxypropylcysteine polymer conjugate; septic shock treatment bisacyloxypropylcysteine polymer conjugate; PEG bisacyloxypropylcysteine conjugate prepn macrophage stimulation
IT Vaccines
(adjuvants for; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)
IT Immunostimulants
(adjuvants; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)
IT Collagens
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates with bisacyloxypropylcysteines; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)
IT Polymers
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates, with bisacyloxypropylcysteines; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)
IT Drug delivery systems
(inhalants; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)
IT Drug delivery systems
(injections; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Anti-infective agents
Antitumor agents
Drug delivery systems
Immunostimulants
Infection
Neoplasm
Wound
**Wound healing promoters**
(macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Drug delivery systems
(nasal; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Antibodies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prodn.; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Shock (circulatory collapse)
(septic; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Macrophage
(stimulation; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Drug delivery systems
(topical; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT Glycoconjugates
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with bisacyloxypropylcysteines; macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT 647013-57-8
RL: PAC (Pharmacological activity); BIOL (Biological study)
(macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT 647013-56-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT 52-90-4D, Cysteine, bisacyloxypropyl derivs., conjugates 9000-69-5D, Pectin, conjugates with bisacyloxypropylcysteines 9003-11-6D, conjugates with bisacyloxypropylcysteines 9003-39-8D, Polyvinylpyrrolidone, conjugates with bisacyloxypropylcysteines **9004-54-0D**, Dextran, conjugates with bisacyloxypropylcysteines 9005-32-7D, Alginic acid, conjugates with bisacyloxypropylcysteines 25322-68-3D, Polyethylene glycol, conjugates with bisacyloxypropylcysteines
RL: **PAC (Pharmacological activity); THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

IT 24991-53-5 210532-98-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(macrophage-stimulating bisacyloxypropylcysteine conjugates and therapeutic use)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:119020 HCAPLUS
DOCUMENT NUMBER: 136:364141
TITLE: Interaction of specifically chemically modified dextrans with transforming growth factor .beta.1: potentiation of its biological activity
AUTHOR(S): Logeart-Avramoglou, Delphine; Huynh, Remi; Chaubet, Frederic; Sedel, Laurent; Meunier, Alain
CORPORATE SOURCE: Laboratoire de Recherches Orthopediques, Universite Paris 7 Denis Diderot, CNRS UMR 7052, Paris, Fr.
SOURCE: Biochemical Pharmacology (2002), 63(2), 129-137
CODEN: BCPCA6; ISSN: 0006-2952
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB TGF.beta., a potent multifunctional cytokine, is well known to demonstrate heparin binding ability. This study investigated the binding capacity of heparin-like family of chem. modified dextrans to TGF.beta.1. Dextran derivs. with various substitution contents in carboxymethyl, benzylamide and sulfate groups were evaluated using a gel mobility shift assay. This structure-function study indicated that a synergistic role of benzylamide and sulfate substituents resulted in an optimal interaction with the growth factor. The effect of these polymers on the biol. response of TGF.beta.1 was assessed using mink lung epithelial cells transfected with a plasminogen activator inhibitor-1 promoter-luciferase construct (PAI/Luc). When the growth factor was mixed with 250 .mu.g/mL of carboxymethyl-benzylamide-dextran (DCMB) or carboxymethyl-benzylamide-sulfate-dextran (DCMBSu), the luciferase gene expression was enhanced. Only polymers exhibiting TGF.beta.1 binding demonstrated a biol. potentiating effect. However, this effect was strongly amplified as the cell plating time increased (35-fold increase with a 2 days plating time vs. 1-fold increase with a 4 h plating time at a 0.25 ng/mL concn. of TGF.beta.1). TGF.beta.1 induced the PAI/Luc construct in a dose-dependent fashion but its effect diminished when added to cells previously cultured for 24 and 48 h. The results indicated that the potentiating effect required a complex formation between TGF.beta.1 and polymers, the action of which seeming to locally maintain TGF.beta.1 in an active form. TGF.beta. isoforms playing a key role in the process of bone repair, specifically designed functionalized dextrans could potentiate the in vivo TGF.beta.1 biol. effect and be used in the field of wound healing applications.

CC 2-10 (Mammalian Hormones)
ST dextran deriv TGF1beta biol activity; carboxymethyl deriv dextran TGF1beta biol activity; sulfate deriv dextran TGF1beta biol activity; benzylamide deriv dextran TGF1beta biol activity; wound healing TGF1beta dextran benzylamide carboxymethyl sulfate deriv
IT **Wound healing**
(chem. modified dextrans interaction with TGF.beta.1 and potentiation of its biol. activity)
IT Lung
(epithelium; chem. modified dextrans interaction with TGF.beta.1 and potentiation of its biol. activity)
IT Transforming growth factors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.beta.1-; chem. modified dextrans interaction with TGF.beta.1 and potentiation of its biol. activity)

IT **9004-54-0D**, Dextran, benzylamide- and carboxymethyl- and sulfate-substituted derivs.
RL: BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(chem. modified dextrans interaction with TGF.beta.1 and potentiation of its biol. activity)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:900400 HCAPLUS
DOCUMENT NUMBER: 134:46808
TITLE: Pharmaceutical compositions with wound healing or anti-complementary activity comprising a dextran derivative
INVENTOR(S): Dahri-correia, Latifa; Jozefonvicz, Jacqueline; Jozefowicz, Marcel; Correia, Jose; Huynh, Remi
PATENT ASSIGNEE(S): Iterfi, Fr.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000076452 | A2 | 20001221 | WO 2000-FR1658 | 20000615 |
| WO 2000076452 | A3 | 20010809 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| FR 2794976 | A1 | 20001222 | FR 1999-7636 | 19990616 |
| JP 2003501449 | T2 | 20030114 | JP 2001-502792 | 20000615 |
| US 2002183282 | A1 | 20021205 | US 2001-20044 | 20011213 |

PRIORITY APPLN. INFO.: FR 1999-7636 A 19990616
WO 2000-FR1658 W 20000615

AB The invention concerns pharmaceutical compns. with wound healing or anti-complementary activity, and their uses, said compns. comprising. (1) at least a dextran deriv. of general formula DMCaBbSuc, a, b, and c resp. representing the degrees of substitution in the groups MC, B and Su, wherein a <<geq 0.6, b = 0 or <<geq 0.1, and c = 0 or ranges widely between 0.1 and 0.5 for a wound healing compn., and a <<geq 0.3, b <<geq 0.1 and c = 0 or ranges widely between 0.1 and 0.4 for a compn. with anti-complementary activity; (2) and at least a pharmaceutically acceptable carrier, said dextran deriv. being present in a single unit dose or at a concn. adapted to the desired wound healing or anti-complementary activity. Desulfated dextrans contg. 0.43 g sulfur per 100 g were prepd. (prepn. given). Efficacy of a soln. of 50 .mu.g/mL desulfated dextran in the cutaneous wound healing of rabbits was shown.

IC ICM A61K
CC 63-6 (Pharmaceuticals)
ST pharmaceutical wound healing anticomplementary dextran deriv
IT Drug delivery systems
(aerosols; pharmaceutical compns. with wound healing or

anti-complementary activity comprising dextran deriv.)

IT **Wound healing promoters**
(cicatrizants; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(gels, topical; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(liposomes; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(microemulsions; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Stomach
(mucosa; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(nanoparticles; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(ointments, ophthalmic; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(ointments; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(oral; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(parenterals; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT **Wound healing**
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Platelet-derived growth factors
Transforming growth factors
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Drug delivery systems
(solns., oral; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT Transforming growth factors
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(.beta.-; pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT 62229-50-9, Epidermal growth factor 106096-93-9, Fibroblast growth factor 2
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

IT 9004-54-0, Dextran, biological studies **9004-54-0D**, Dextran, derivs., biological studies
RL: DEV (Device component use); **THU (Therapeutic use)**; BIOL

(Biological study); USES (Uses)
(pharmaceutical compns. with wound healing or anti-complementary activity comprising dextran deriv.)

L37 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:627957 HCAPLUS
DOCUMENT NUMBER: 133:187992
TITLE: Positive-charged cross-linked polysaccharides for scar reduction
INVENTOR(S): Gruskin, Elliott A.; Christoforou, Christopher T.
PATENT ASSIGNEE(S): United States Surgical Corp., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000051566 | A1 | 20000908 | WO 2000-US5610 | 20000303 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 6410519 | B1 | 20020625 | US 2000-519006 | 20000303 |
| US 2003023209 | A1 | 20030130 | US 2002-58182 | 20020125 |

PRIORITY APPLN. INFO.: US 1999-122814P P 19990304
US 2000-519006 A1 20000303

AB A method of reducing scar formation at a wound site includes contacting the wound site with an effective scar reducing amt. of a cross-linked polysaccharide having a pos. charge and thereby reducing scar formation as the wound site heals. Such polysaccharide includes bioabsorbable cross-linked dextrans or alginates. The pos. charge may be provided by diethylaminoethyl (DEAE) moieties. The cross-linked polysaccharide can be applied to the wound site as a powder or bead. The cross-linked polysaccharide may also be contained in a compn. including a pharmaceutically acceptable vehicle. Biocompatible surgical devices are provided with an effective scar reducing amt. of a cross-linked polysaccharide having a pos. charge which reduce scar formation at healing wound sites. A method of reducing TGF-.beta. activity is also provided. Results of tests with DEAE-Sephadex beads are presented.
IC A61K009-14; A61K031-715; A61L017-10; A61L027-20
CC 1-12 (Pharmacology)
Section cross-reference(s): 63
ST pos charged crosslinked polysaccharide scar wound; dextran pos charged crosslinked scar wound; alginate pos charged crosslinked scar wound; diethylaminoethyl crosslinked polysaccharide scar wound; surgical device pos charged crosslinked polysaccharide scar; Sephadex DEAE scar wound; TGFbeta modulation pos charged crosslinked polysaccharide
IT Drug delivery systems
(beads; pos.-charged cross-linked polysaccharides for scar redn.)
IT Medical goods
(biocompatible surgical devices; pos.-charged cross-linked polysaccharides for scar redn.)

IT Functional groups
(diethylaminoethyl (DEAE); pos.-charged cross-linked polysaccharides for scar redn.)
IT Drug delivery systems
(gels; pos.-charged cross-linked polysaccharides for scar redn.)
IT Prosthetic materials and Prosthetics
(implants; pos.-charged cross-linked polysaccharides for scar redn.)
IT Drug delivery systems
(liqs., nonpolar fluids; pos.-charged cross-linked polysaccharides for scar redn.)
IT Drug delivery systems
**Wound healing promoters**
(pos.-charged cross-linked polysaccharides for scar redn.)
IT Polysaccharides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pos.-charged cross-linked polysaccharides for scar redn.)
IT Drug delivery systems
(powders; pos.-charged cross-linked polysaccharides for scar redn.)
IT Medical goods
(sutures; pos.-charged cross-linked polysaccharides for scar redn.)
IT Transforming growth factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta.-; pos.-charged cross-linked polysaccharides for scar redn.)
IT **9004-54-0D**, Dextran, pos.-charged cross-linked, biological studies
9064-92-0, DEAE-Sephadex
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(pos.-charged cross-linked polysaccharides for scar redn.)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:98358 HCAPLUS
DOCUMENT NUMBER: 132:146658
TITLE: Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators
INVENTOR(S): Korsmeyer, Stanley J.; Schlesinger, Paul H.
PATENT ASSIGNEE(S): Washington University, USA
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000006187 | A2 | 20000210 | WO 1999-US17276 | 19990730 |
| WO 2000006187 | A3 | 20000504 | | |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,

MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | | |
|---|---|---|---|---|---|
| US 6165732 | A | 20001226 | US 1998-127048 | 19980731 | |
| CA 2339096 | AA | 20000210 | CA 1999-2339096 | 19990730 | |
| AU 9952440 | A1 | 20000221 | AU 1999-52440 | 19990730 | |
| EP 1100525 | A2 | 20010523 | EP 1999-937650 | 19990730 | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | | |
| JP 2002524391 | T2 | 20020806 | JP 2000-562041 | 19990730 | |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 1998-127048 | A2 | 19980731 |
| US 1997-61823P | P | 19971014 |
| WO 1999-US17276 | W | 19990730 |

AB Methods and compns. for modulating apoptosis in cells and patients are provided. One method comprises selecting a compd. which affects the ability of a channel comprised of a member of the BCL-2 family to allow passage of cytochrome c, then administering the compd. to the cell or patient. Another method comprises selecting a compd. which changes ion conductance properties of the channel, then administering the compd. to the cell or patient. Compds. which affect these channel characteristics are also provided. Addnl., methods for identifying apoptosis-modulating compds. using lipid bilayers are provided. One method involves contacting a compd. of interest with a lipid bilayer which contains an ion channel formed by an anti-apoptotic or pro-apoptotic polypeptide of the BCL-2 family and assaying for changes in the ability of the pore to allow passage of cytochrome c. Changes in ion conductance properties of the channel, including ion selectivity, single channel conductance and rectification are also useful characteristics for identifying apoptosis-modulating compds. A second method identifies compds. which can form ion channels in planar lipid bilayers and dets. the ability to allow passage of cytochrome c, the ion selectivity and the pH dependence of such channels, where apoptosis modulating activity is predicted based on comparing these channel forming characteristics with those of BCL-2 family members.

IC ICM A61K038-17
ICS A61P025-28; A61P037-02; A61P043-00

CC 1-12 (Pharmacology)
Section cross-reference(s): 63

ST Bcl2 family peptide apoptosis modulator

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(A1; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bad; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bak; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bax; Bcl-2 family-derived peptides for modulation of apoptosis, and

methods for identification of apoptosis modulators)
IT Proteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bax.DELTA.TM; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Aging, animal
Anti-inflammatory agents
Anti-ischemic agents
Antiarthritics
Antitumor agents
Apoptosis
Autoimmune disease
Cell death
Drug delivery systems
Drug screening
Immunodeficiency
Liposomes
Lymphoproliferative disorders
Mitochondria
Molecular modeling
Nervous system agents
Pore
Protein sequences
**Wound healing promoters**
pH
(Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Chloride channel
Potassium channel
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Proteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bcl-2.DELTA.TM; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bcl-x, Bcl-xS; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bcl-xL; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)
IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(Bid; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bik; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Intestine, disease
(Crohn's; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Mcl-1 (myeloid cell leukemia sequence-1); Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(bcl-2; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Nervous system
(degeneration; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Fertility
(disorder; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Biological transport
(efflux; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Reperfusion
(injury; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Lipids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(lipid bilayer; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Adenoviridae
African swine fever virus
Human adenovirus
Human herpesvirus 4
(neoplasia caused by; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT Liposomes
(proteoliposomes; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT 222415-25-0 222415-25-0D, derivs. 256955-94-9D, derivs. 256955-94-9D, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT 7440-09-7, Potassium, biological studies 9007-43-6, Cytochrome c, biological studies 16887-00-6, Chloride, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT 2321-07-5D, Fluorescein, dextran conjugates **9004-54-0D**, Dextran, fluorescein conjugates, biological studies 9007-43-6D, Cytochrome c, FITC conjugates, biological studies 27072-45-3D, Fluorescein isothiocyanate, conjugates with dextran and with cytochrome c 72088-94-9, Carboxyfluorescein
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT 257898-69-4, Bcl-2 protein (human)
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(amino acid sequence; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

IT 151440-09-4, Protein (mouse RL-7 cell gene bax isoform .alpha. reduced)
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; Bcl-2 family-derived peptides for modulation of apoptosis, and methods for identification of apoptosis modulators)

L37 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:804215 HCAPLUS
DOCUMENT NUMBER: 130:57279
TITLE: New medicaments based on polymers composed of methacrylamide-modified gelatin
INVENTOR(S): Schacht, Etienne; Van den Bulcke, An; Delaey, Bernard; Draye, Jean-Pierre
PATENT ASSIGNEE(S): Innogenetics N.V., Belg.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9855161 | A1 | 19981210 | WO 1998-EP3320 | 19980603 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9881101 | A1 | 19981221 | AU 1998-81101 | 19980603 |
| AU 736784 | B2 | 20010802 | | |
| EP 986408 | A1 | 20000322 | EP 1998-930789 | 19980603 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002506431 | T2 | 20020226 | JP 1999-501506 | 19980603 |
| US 6458386 | B1 | 20021001 | US 2000-424432 | 20000128 |

PRIORITY APPLN. INFO.: EP 1997-870083 A 19970603
WO 1998-EP3320 W 19980603

AB The present invention relates to a medicament comprising a biopolymer matrix comprising crosslinked vinyl derivs. of gelatin, or copolymd. methacrylamide modified gelatin with vinyl-modified polysaccharides, or

crosslinked vinyl-substituted polysaccharide and gelatin being phys. entrapped in a semi-interpenetrating network. Preferably said polysaccharide comprises dextran or xanthan. The present invention relates to a wound dressing or a controlled release device comprising said biopolymer matrix. Preferably said matrix is in the form of a hydrated film, a hydrated or dry foam, dry fibers which may be fabricated into a woven or non-woven tissue, hydrated or dry microbeads, dry powder, or covered with a semipermeable film, so as to control the humidity of the wound covered with the dressing, with the permeability chosen so as to maintain this humidity within a therapeutically optimal window. Gelatin methacrylamide was prepd. from gelatin and methacrylic anhydride and the viscoelastic properties studied. Acrylamide-modified dextran and dextran methacrylate were also prepd.

IC ICM A61L015-32
ICS A61L025-00; A61L015-44; A61K009-20; A61K009-16; A61K009-70; C08H001-06; C08G081-02

CC 63-8 (Pharmaceuticals)

ST gelatin methacrylamide deriv medical; wound dressing gelatin methacrylamide

IT Drug delivery systems
(controlled-release; medicaments based on polymers composed of methacrylamide-modified gelatin)

IT Medical goods
(dressings; medicaments based on polymers composed of methacrylamide-modified gelatin)

IT Interpenetrating polymer networks
Vaccines
**Wound healing promoters**
(medicaments based on polymers composed of methacrylamide-modified gelatin)

IT Growth factors, animal
Platelet-derived growth factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medicaments based on polymers composed of methacrylamide-modified gelatin)

IT Gelatins, biological studies
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(methacrylamide-modified; medicaments based on polymers composed of methacrylamide-modified gelatin)

IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vinyl polymer derivs.; medicaments based on polymers composed of methacrylamide-modified gelatin)

IT Transforming growth factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-; medicaments based on polymers composed of methacrylamide-modified gelatin)

IT 79-39-0DP, Methacrylamide, dextran and gelatin derivs. 760-93-0DP, Methacrylic anhydride, reaction products with gelatin or dextran **9004-54-0DP**, Dextran, acrylamide- and methacrylate-modified, biological studies 29513-26-6DP, 2-Vinyl-4,4-dimethyl-2-oxazolin-5-one, reaction products with dextrin 63653-13-4P, Dextran methacrylate
RL: PRP (Properties); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(medicaments based on polymers composed of methacrylamide-modified gelatin)

IT 61912-98-9, Igf 62031-54-3, Fgf 62229-50-9, Egf
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medicaments based on polymers composed of methacrylamide-modified gelatin)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:351766 HCAPLUS
DOCUMENT NUMBER: 129:45327
TITLE: Method and carbohydrate composition for promoting tissue repair
INVENTOR(S): Jorgensen, Thorsten; Moss, Judi; Nicolajsen, Henrik Vigan; Nielsen, Lise Sylvest
PATENT ASSIGNEE(S): Dumex-Alpharma A/S, Den.; Jorgensen, Thorsten; Moss, Judi; Nicolajsen, Henrik Vigan; Nielsen, Lise Sylvest
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9822114 | A1 | 19980528 | WO 1997-DK525 | 19971114 |
| W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, ES, FI, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9749412 | A1 | 19980610 | AU 1997-49412 | 19971114 |

| PRIORITY APPLN. INFO.: | | |
|---|---|---|
| DK 1996-1297 | A | 19961115 |
| US 1997-35444P | P | 19970130 |
| WO 1997-DK525 | W | 19971114 |

AB A combination of (a) an oligo- or polysaccharide contg. amino sugar units and (b) a sulfated mono-, di- or oligosaccharide enhances the healing of wounds in collagen-contg. tissues, including skin, bone, and mucosa. Compd. (a) may be, e.g., chitosan obtained by deacetylation of chitin to various degrees, chitosan derivs., glycosaminoglycans including chondroitin, chondroitin sulfate, hyaluronic acid, dermatan sulfate, and keratan sulfate, aminated dextrans including DEAE-dextran, aminated starch, aminated glycogen, aminated cellulose, aminated pectin, heparin, and salts, complexes, derivs., and mixts. thereof,. Compd. (b) may be a disaccharide such as sucrose, a sucrose deriv., or a complex or salt thereof, wherein the disaccharide is at least tetrasulfated. A combination of chitosan and sucrose octasulfate (I) is esp. useful. Thus, a 1% soln. of chitosan (75-85% deacetylated) in 1% AcOH was added dropwise to 4 vols. of an aq. soln. of I (.ltoreq.12.5 mg/mL) over 40 min to form small transparent spheres of chitosan-I complex which were filtered off and dried at room temp. to produce flakes. I was released from the complex by incubation with lysozyme, which occurs in wounds. A cream formulation was prepd. by combining (a) a melt contg. polysorbate 80 5,

cetylan 50, paraffin oil 50, and glycerol monostearate 60 g with (b) a soln. of Me p-hydroxybenzoate 1, 85% glycerol 40, and sorbitol 70 in water 724 g at 70.degree., cooling, and adding 100 g chitosan-I complex.

IC ICM A61K031-70
ICS A61K031-73; A61K009-16; A61K009-70

CC 63-6 (Pharmaceuticals)

ST wound healing chitosan sucrose sulfate; tissue repair chitosan sucrose sulfate

IT Glycosaminoglycans, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(complexes with sugar sulfates; method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(gels; method and carbohydrate compn. for promoting tissue repair)

IT Anti-inflammatory agents
**Wound healing promoters**
(method and carbohydrate compn. for promoting tissue repair)

IT Collagens, biological studies
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(ointments, creams; method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(ointments; method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(powders; method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(sprays; method and carbohydrate compn. for promoting tissue repair)

IT Disaccharides
Monosaccharides
Oligosaccharides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sulfated, complexes with glycosaminoglycans; method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(suspensions; method and carbohydrate compn. for promoting tissue repair)

IT Drug delivery systems
(topical; method and carbohydrate compn. for promoting tissue repair)

IT 54244-70-1, Sucrose sulfate 57680-56-5, Sucrose octasulfate 74135-10-7, Sodium sucrose octasulfate 153315-46-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(complexes with glycosaminoglycans; method and carbohydrate compn. for promoting tissue repair)

IT 9000-69-5D, Pectin, amino derivs., complexes with sugar sulfates 9004-34-6D, Cellulose, amino derivs., complexes with sugar sulfates, biological studies **9004-54-0D**, Dextran, amino derivs., complexes with sugar **sulfates**, biological studies 9004-61-9D, Hyaluronic acid, complexes with sugar sulfates 9005-25-8D, Starch, amino derivs.,

complexes with sugar sulfates, biological studies 9005-49-6D, Heparin, complexes with sugar sulfates, biological studies 9005-79-2D, Glycogen, amino derivs., complexes with sugar sulfates, biological studies 9007-27-6D, Chondroitin, complexes with sugar sulfates 9007-28-7D, Chondroitin sulfate, complexes with sugar sulfates 9012-76-4D, Chitosan, complexes with sugar sulfates 9015-73-0D, complexes with sugar sulfates 9056-36-4D, Keratan sulfate, complexes with sugar sulfates 24967-94-0D, Dermatan sulfate, complexes with sugar sulfates
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(method and carbohydrate compn. for promoting tissue repair)
IT 62031-54-3, Fibroblast growth factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(stabilization and stimulation of; method and carbohydrate compn. for promoting tissue repair)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:75921 HCAPLUS
DOCUMENT NUMBER: 128:132493
TITLE: Diagnostic apparatus for determining precorneal retention time of ophthalmic formulations
INVENTOR(S): Joshi, Abhay; Meadows, David; Paugh, Jerry
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S., 8 pp., Cont. of U. S. Ser. No. 378,543, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 5707614 | A | 19980113 | US 1996-673197 | 19960627 |
| PRIORITY APPLN. INFO.: | | | US 1995-378543 | 19950126 |

AB A method for measuring ophthalmic formulation retention on the surface of an eye include dissolving a fluorescent macromol. in an ophthalmic formulation to form a fluorescently labeled formulation, topically administering the fluorescently labeled formulation to an eye to form a thin film on the eye surface, and measuring the fluorescence from the thin film as a function of time with an app. which is provided for illuminating the eye to cause fluorescence as the fluorescently labeled thin film is eliminated from the eye by normal blinking and lacrimation. The fluorescent macromols. include FITC-dextran, TRITC-dextran, and a phycobiliprotein. The pharmaceutical agent is selected from the group consisting of an agent for treatment of dry eye, a wetting agent for contact lenses, and an agent for wound healing.
IC ICM A61K031-74
NCL 424078040
CC 63-8 (Pharmaceuticals)
ST ophthalmic drug fluorescent macromol cornea retention; app FITC dextran ophthalmic drug retention
IT Eye, disease

(dry; ophthalmic compns. contg. drugs and fluorescent macromols. to measure drug retention in eyes)

IT Fluorescent substances
**Wound healing promoters**
(ophthalmic compns. contg. drugs and fluorescent macromols. to measure drug retention in eyes)

IT Biliproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic compns. contg. drugs and fluorescent macromols. to measure drug retention in eyes)

IT Drug delivery systems
(ophthalmic; ophthalmic compns. contg. drugs and fluorescent macromols. to measure drug retention in eyes)

IT Contact lenses
(wetting agents for; ophthalmic compns. contg. drugs and fluorescent macromols. to measure drug retention in eyes)

IT **9004-54-0D**, Dextran, conjugate with TRITC, biological studies
60842-46-8, FITC-Dextran 107347-53-5D, TRITC, conjugate with dextran
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(ophthalmic compns. contg. drugs and fluorescent macromols. to measure drug retention in eyes)

L37 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:428176 HCAPLUS
DOCUMENT NUMBER: 133:22455
TITLE: Manufacture of hydrophilic gels for preparing wound healing materials or other medical use
INVENTOR(S): Wu, Xiangjun
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| CN 1200299 | A | 19981202 | CN 1997-108916 | 19970522 |
| CN 1067281 | B | 20010620 | | |

PRIORITY APPLN. INFO.: CN 1997-108916 19970522

AB The title gel for prepg. e.g. wound healing materials contains mixed adhesive materials of polyisobutene with different mol. wt., softing agent, matrix material, tackifier, substances which from gel while contacting with water, and tert-4-hydroxy anise ether, bromdiethylacetylcarbamine, micropowd. silica gel, and silver norfloxacin. The matrix material can be styrene-butadiene block polymer, styrene-isoprene block polymer, ternary ethylene-propylene thermoplastic elastomer, thermoplastic polyisoprene elastomer, or thermoplastic polyurethane elastomer; the tackifier from pentalyn, rosin glycerin ester, and terpene resin. The silica gel used to absorb water can be substituted by lactic acid - glycolic acid polymer, betadine, styrene-maleic anhydride copolymer, Na polyacrylate, polyoxyethylene etc. The softening agent is selected from medicinal vaseline, liq. wax, and petroleum ether; and the vol. percentages of vaseline and liq. wax are 15-23% and 1-5% resp. The substances which form gel while contacting with water is selected from CM-cellulose, Na alginate, microbiol. alginate, hydroxyethylmethyl

cellulose, hydroxypropylmethyl cellulose, Na CM-cellulose, carboxymethyl-benzyl dextran, cross-linked dextran, and Na carboxymethyl starch ext. The adhesive material is a mixt. of high mol. wt. polyisobutene and low mol. wt. polyisobutene, medium mol. wt. polyisobutene, mixt. of polyisobutene or chlorinated or brominated polyisobutene and small amt. of polyisoprene. The gel is composed of styrene-butadiene block polymer 10-15, medium mol. wt. polyisobutene 11-16, low mol. wt. polyisobutene 3-6, CM-cellulose 20-25, polyvinylpyrrolidone 8-12, kaobomu 1-3, silver norfloxacin 0.3-0.5, tert-butyl-4-hydroxanisole 0.5-3, medicinal vaseline 12-15, medicinal liq. wax 2-5, and silica gel 13-17 vol.%. The process comprises mixing the adhesive material, softening agent and matrix material, filtering at 120-150.degree., mixing with other raw materials, and blending.

IC ICM A61L025-00

CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 38

ST medical gel polyisobutene norfloxacin; hydrophilic gel wound healing

IT Drug delivery systems
(gels, hydrophilic; manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

IT Waxes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liq.; manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

IT Adhesive tapes
**Wound healing promoters**
(manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

IT Ligroine
Natural rubber, biological studies
Petrolatum
Polyoxyalkylenes, biological studies
Rosin
Rubber, biological studies
Silica gel, biological studies
Synthetic rubber, biological studies
Thermoplastic rubber
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

IT Terpenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polymers; manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

IT Urethane rubber, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thermoplastic; manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

IT 9003-04-7, Sodium polyacrylate 9003-31-0, Polyisoprene 9003-39-8, Polyvinyl pyrrolidone 9003-55-8, Butadiene-styrene polymer 9004-32-4 **9004-54-0D**, Dextran, carboxymethyl-benzyl, biological studies 9004-65-3, Hydroxypropylmethyl cellulose 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9011-13-6, Maleic anhydride-styrene copolymer 9032-42-2, Hydroxyethylmethyl cellulose 9063-38-1, Sodium carboxymethyl starch 9080-01-7, Pentalyn 25013-16-5, tert-Butyl-4-hydroxy anisole 25038-32-8, Isoprene-styrene polymer 25322-68-3 25655-41-8, Betadine 34346-01-5, Glycolic acid-lactic acid polymer 88056-28-4, Silver

Norfloxacin
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(manuf. of hydrophilic gels for prepg. wound healing materials or other medical use)

L37 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:745977 HCAPLUS
DOCUMENT NUMBER: 128:26965
TITLE: New medicaments containing gelatin crosslinked with oxidized polysaccharides
INVENTOR(S): Schacht, Etienne; Draye, Jean-Pierre; Delaey, Bernard
PATENT ASSIGNEE(S): Innogenetics N.V., Belg.
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9741899 | A1 | 19971113 | WO 1997-EP2279 | 19970505 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2251129 | AA | 19971113 | CA 1997-2251129 | 19970505 |
| AU 9729520 | A1 | 19971126 | AU 1997-29520 | 19970505 |
| AU 725654 | B2 | 20001019 | | |
| EP 914168 | A1 | 19990512 | EP 1997-923846 | 19970505 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2000511512 | T2 | 20000905 | JP 1997-539529 | 19970505 |
| US 6132759 | A | 20001017 | US 1998-180057 | 19981027 |

PRIORITY APPLN. INFO.: EP 1996-870059 A 19960503
WO 1997-EP2279 W 19970505

AB The present invention relates to a medicament comprising a biopolymer matrix comprising gelatin crosslinked with an oxidized polysaccharide. Preferably said oxidized polysaccharide comprises an oxidized dextran or an oxidized xanthan. Preferably said medicament is a wound dressing. Preferably said matrix is in the form of a hydrated film, a hydrated or dry foam, dry fibers which may be fabricated into a woven or non-woven tissue, hydrated or dry micro beads, dry powder; or said matrix is covered with a semipermeable film, so as to control the humidity of the wound covered with the dressing, with the permeability chosen so as to maintain this humidity within a therapeutically optimal window. The invention also relates to a controlled release device comprising a biopolymer matrix comprising gelatin crosslinked with an oxidized polysaccharide into which a therapeutically effective amt. of a drug is non-covalently incorporated. Preferably also addnl. compds. are immobilized, said compds. having substantial affinity for the incorporated drug, so as to slow down the release of the drug from the matrix and/or stabilizing the drug. The present invention also relates to a wound dressing comprising such a slow

or controlled release device. Preferably said matrix is covered with a semipermeable film, with a permeability chosen so as to control the humidity of the wound covered with the dressing, and to maintain the humidity within a therapeutically optimal window. Preferably multiple forms of said matrix are combined to form a wound dressing, each form having different properties with respect to chem. compn. and phys. and controlled release characteristics. Preferably into each of the multiple forms one or more different active factors are non-covalently incorporated. Preferably, the invention relates to a wound dressing wherein one or more of the active factors belong to any of the following groups: EGF-like factors, FGF-like factors, TGF-.beta.-like factors, IGF-like factors, PDGF-like factors, keratinocyte cell lysate. The invention further relates to methods of producing and using said wound dressings or said controlled or slow release devices as defined above.

IC ICM A61L025-00
ICS A61L015-32; A61L015-44; A61L015-46; A61K009-70; A61K009-16; A61K009-12; A61K009-20

CC 63-8 (Pharmaceuticals)

ST wound dressing gelatin crosslinked oxidized polysaccharide

IT Drug delivery systems
(controlled-release; medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Gelatins, biological studies
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crosslinked; medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Medical goods
(dressings; medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Growth factors, animal
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heparin-binding; medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Skin
(keratinocyte; medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Antibacterial agents
**Wound healing promoters**
(medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Growth factors, animal
Platelet-derived growth factors
Synthetic fibers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT Polysaccharides, biological studies
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(oxidized; medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT **9004-54-0DP**, Dextran, oxidized, crosslinked with gelatin, biological studies 11138-66-2DP, Xanthan, oxidized, crosslinked with gelatin
RL: PRP (Properties); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(medicaments contg. gelatin crosslinked with oxidized polysaccharides)

IT 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate

9042-14-2, Dextran sulfate 9050-30-0, Heparan sulfate 24967-94-0, Dermatan sulfate 61912-98-9, Insulin-like growth factor 62031-54-3, Fibroblast growth factor 62229-50-9, Epidermal growth factor 127464-60-2, Vascular endothelial growth factor
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medicaments contg. gelatin crosslinked with oxidized polysaccharides)

L37 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:150322 HCAPLUS
DOCUMENT NUMBER: 124:185595
TITLE: Methods and compositions for treating wounds
INVENTOR(S): Gruskin, Elliott A.; Jiang, Ying
PATENT ASSIGNEE(S): United States Surgical Corp., USA
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 693291 | A2 | 19960124 | EP 1995-111523 | 19950721 |
| EP 693291 | A3 | 19990915 | | |
| EP 693291 | B1 | 20011219 | | |
| R: DE, FR, GB, IT | | | | |
| US 5502042 | A | 19960326 | US 1994-278778 | 19940722 |
| CA 2154124 | AA | 19960123 | CA 1995-2154124 | 19950718 |

PRIORITY APPLN. INFO.: US 1994-278778 A 19940722
AB Wound treatment compns. include an oxidized cross-linked polysaccharide which has a chem. induced charge. Preferred polysaccharides are cross-linked dextrans. A charge is preferably provided by diethylaminoethyl groups (DEAR groups) or carboxymethyl groups. The oxidized cross-linked polysaccharide can be applied as a powder directly to a wound site. Alternatively, the oxidized cross-linked polysaccharide can be combined with a delivery vehicle to form a liq. or paste to be applied to a wound site.
IC ICM A61L025-00
CC 63-6 (Pharmaceuticals)
ST wound treatment oxidized polysaccharide; dextran oxidized wound treatment
IT **Wound healing**
(oxidized cross-linked polysaccharides for treating wounds)
IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oxidized, oxidized cross-linked polysaccharides for treating wounds)
IT **9004-54-0D**, Dextran, oxidized 12609-80-2, DEAE-Sephadex A 25
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(oxidized cross-linked polysaccharides for treating wounds)

L37 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:155196 HCAPLUS
DOCUMENT NUMBER: 124:220975
TITLE: FGF protection and inhibition of human neutrophil elastase by carboxymethyl benzylamide sulfonate dextran derivatives
AUTHOR(S): Meddahi, Anne; Lemdjabar, Hassan; Caruelle, Jean-Pierre; Barritault, Denis; Hornebeck, William

CORPORATE SOURCE: Lab. Recherche Croissance Regeneration Tissulaires, Univ. Paris XII-Val de Marne, Creteil, F94010, Fr.
SOURCE: International Journal of Biological Macromolecules (1996), 18(1,2), 141-5
CODEN: IJBMDR; ISSN: 0141-8130
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several derivatized dextrans (DxD) contg. defined percentage of carboxymethyl, carboxymethyl benzylamide and carboxymethyl benzylamide sulfonate groups have been shown to stimulate tissue repair in various in vivo models including skin, bone, muscle and cornea. These selected DxD were also shown to mimic heparin or heparan sulfate by their ability to interact with, stabilize and protect the heparin-binding growth factor of the fibroblast growth factor family against trypsin digestion. The wound healing action of these DxD was explained by postulating that the endogenously released heparin-binding growth factors could be protected within the wound. To further understand the action of these DxD on tissue repair, the authors have studied their effect on the human neutrophil elastase (HNE) activity, one of the proteases involved in wound repair. These DxD inhibited HNE in an hyperbolic non-competitive manner. Extent of HNE inhibition by DxD increased with their mol. wt. and benzylamide sulfonate substitution levels. One DxD, RGT11, was the best inhibitor (Ki 40 pM) and efficiently inhibited FGF-2 proteolysis by HNE, restoring its growth-promoting activity towards human skin fibroblasts. The data contribute to a better understanding of the wound-healing property and anti-inflammatory activity of these polymers.

CC 2-5 (Mammalian Hormones)
ST FGF neutrophil elastase dextran deriv
IT Fibroblast
Neutrophil
**Wound healing**
(FGF protection and inhibition of human neutrophil elastase by carboxymethyl benzylamide sulfonate dextran derivs.)
IT **9004-54-0D**, Dextran, carboxymethylbenzylamide sulfonate derivs.
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(FGF protection and inhibition of human neutrophil elastase by carboxymethyl benzylamide sulfonate dextran derivs.)
IT 9004-06-2, Elastase 106096-93-9, FGF-2
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(FGF protection and inhibition of human neutrophil elastase by carboxymethyl benzylamide sulfonate dextran derivs.)

L37 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:996291 HCAPLUS
DOCUMENT NUMBER: 124:21800
TITLE: Use of growth factor-protective biopolymers for treatment of digestive tract injuries
INVENTOR(S): Barritault, Denis; Caruelle, Jean-Pierre; Meddahi, Anne
PATENT ASSIGNEE(S): Universite Paris Val de Marne, Fr.
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9526737 | A1 | 19951012 | WO 1995-FR399 | 19950329 |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| FR 2718023 | A1 | 19951006 | FR 1994-3804 | 19940330 |
| FR 2718023 | B1 | 19960814 | | |
| CA 2186757 | AA | 19951012 | CA 1995-2186757 | 19950329 |
| EP 752863 | A1 | 19970115 | EP 1995-915223 | 19950329 |
| EP 752863 | B1 | 20021204 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 10506606 | T2 | 19980630 | JP 1995-525453 | 19950329 |
| AT 228846 | E | 20021215 | AT 1995-915223 | 19950329 |
| ES 2188655 | T3 | 20030701 | ES 1995-915223 | 19950329 |
| US 5852004 | A | 19981222 | US 1996-714178 | 19961230 |

PRIORITY APPLN. INFO.: FR 1994-3804 A 19940330
WO 1995-FR399 W 19950329

AB The use is disclosed of .gtoreq.1 polymer or biopolymer known as HBGFPP, capable of specifically protecting growth factors of FGF and TGF-.beta. families from trypsin degrdn., for prepg. a drug for treating injuries to the digestive tract and the primary or secondary derived tissues of the endoderm and mesoderm. Prepn. of CMDBS (carboxymethyl-, benzylamide- and benzylamide sulfonate-substituted dextrans) are described.

IC ICM A61K031-725
CC 1-9 (Pharmacology)
Section cross-reference(s): 2, 33, 63
ST biopolymer digestive tract injury treatment; endoderm mesoderm tissue treatment biopolymer; dextran deriv digestive tract injury treatment
IT Animal tissue
Blood coagulation
Pharmaceutical dosage forms
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Animal growth regulators
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Complement
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Biopolymers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Glycolipids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or

mesodermal tissue)
IT Glycopeptides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Glycoproteins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Glycosaminoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT **Wound healing promoters**
(cicatrizants, FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Digestive tract
(disease, injury, FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Embryo
(entoderm, FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Embryo
(mesoderm, FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Glycosaminoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sulfated, FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT Animal growth regulators
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta.-transforming growth factors, FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)
IT 9001-90-5, Plasmin 9004-06-2, Elastase 9004-54-0, Dextran, biological studies 9005-49-6, Heparin, biological studies 9042-14-2, Dextran sulfate 37288-39-4, Sucrase 57821-29-1, Sulodexide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)

IT **9004-54-0D**, Dextran, carboxymethyl-, benzylamide- and benzylamide sulfonate-substituted
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)

IT 9002-07-7, Trypsin 62031-54-3, Fibroblast growth factor 106096-92-8, Acidic fibroblast growth factor 106096-93-9, Basic fibroblast growth factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)

IT 119684-05-8, Mesoglycan
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)

IT 9050-30-0P, Heparan sulfate
RL: PUR (Purification or recovery); PREP (Preparation)
(FGF and TGF-.beta. family growth factor-protective biopolymers for treatment of digestive tract injuries and injuries to endodermal or mesodermal tissue)

L37 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:996290 HCAPLUS
DOCUMENT NUMBER: 124:21818
TITLE: Use of growth factor-protective biopolymers for treatment of skeletal or cardiac muscle
INVENTOR(S): Barritault, Denis; Caruelle, Jean-Pierre; Desgranges, Pascal; Gautron, Jean; Meddahi, Anne
PATENT ASSIGNEE(S): Universite Paris Val de Marne, Fr.
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9526736 | A1 | 19951012 | WO 1995-FR398 | 19950329 |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| FR 2718026 | A1 | 19951006 | FR 1994-3803 | 19940330 |
| FR 2718026 | B1 | 19970117 | | |
| CA 2186760 | AA | 19951012 | CA 1995-2186760 | 19950329 |
| EP 752862 | A1 | 19970115 | EP 1995-915222 | 19950329 |
| EP 752862 | B1 | 20030625 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |

| | | | | | |
|---|---|---|---|---|---|
| JP 10503472 | T2 | 19980331 | JP 1995-525452 | | 19950329 |
| AT 243521 | E | 20030715 | AT 1995-915222 | | 19950329 |
| US 5852003 | A | 19981222 | US 1997-714176 | | 19970103 |
| PRIORITY APPLN. INFO.: | | | FR 1994-3803 | A | 19940330 |
| | | | WO 1995-FR398 | W | 19950329 |

AB The use is disclosed of .gtoreq.1 polymer or biopolymer known as HBGFPP, capable of specifically protecting growth factors of FGF and TGF-.beta. families from trypsin damage, for prepg. a drug for treating skeletal or cardiac muscle tissue. Prepn. and evaluation of CMDBS (carboxymethyl-, benzylamide- and benzylamide sulfonate-substituted dextrans) are described.

IC ICM A61K031-725

CC 1-12 (Pharmacology)
Section cross-reference(s): 2, 33, 63

ST biopolymer skeletal cardiac muscle treatment; dextran deriv skeletal cardiac muscle treatment

IT Blood coagulation
Muscle
Pharmaceutical dosage forms
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Animal growth regulators
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Complement
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Biopolymers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Glycoproteins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Glycosaminoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Heart
(muscle; growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT **Wound healing promoters**
(cicatrizants, growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Glycosaminoglycans, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sulfated, growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT Animal growth regulators
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta.-transforming growth factors, growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT 9001-90-5, Plasmin 9004-06-2, Elastase 9004-54-0, Dextran, biological studies 9005-49-6, Heparin, biological studies 9042-14-2, Dextran sulfate 37288-39-4, Sucrase 57821-29-1, Sulodexide 119684-05-8, Mesoglycan
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT **9004-54-0D**, Dextrans, carboxymethyl-, benzylamide- and benzylamide sulfonate-substituted
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT 9002-07-7, Trypsin 62031-54-3, Fibroblast growth factor 106096-92-8, Acidic fibroblast growth factor 106096-93-9, Basic fibroblast growth factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

IT 9050-30-0P, Heparan sulfate
RL: PUR (Purification or recovery); PREP (Preparation)
(growth factor-protective biopolymers for treatment of skeletal or cardiac muscle)

L37 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:291111 HCAPLUS
DOCUMENT NUMBER: 122:142154
TITLE: New approaches to tissue regeneration and repair
AUTHOR(S): Meddahi, A.; Blanquaert, F.; Saffar, J. L.; Colombier, M. -L.; Caruelle, J. P.; Josefonvicz, J.; Barritault, D.
CORPORATE SOURCE: Laboratoire d'etude sur la Croissance, Universite Paris Val de Marne, Villetaneuse, Fr.
SOURCE: Pathology, Research and Practice (1994), 190(9-10), 923-8
CODEN: PARPDS; ISSN: 0344-0338
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several heparin-binding growth factors (HBGFs) are thought to play a key role in the natural processes of tissue regeneration or repair after being released by neighboring, inflammatory or circulating cells as well as from extracellular matrix assocd. heparan sulfate proteoglycosaminoglycans. In order to better understand how the bioavailability of these HBGFs can take part in the regulation of the wound healing processes, the healing effect of various chem. substituted dextrans (CMDBS) selected for their affinity for HBGFs, alone and in assocn. with HBGFs, were studied. The CMDBS was

obtained by substitution of methylcarboxylic (CM), benzylamide (B) and benzylamine sulfonate (S) groups in proportion of 83%, 23% and 13%, resp., for CMDBS K. CMDBS K could (1) potentiate the biol. activity of 1 or 2 FGFs, (2) protect 1 and 2 FGFs against thermal or pH inactivation, and (3) protect a and b FGFs against proteolytic degrdn. CMDBS K was tested alone in cutaneous and bone wound healing models and for its ability to stabilize FGFs. Rats were punched and skin regeneration was studied by morphometric and histol. anal. The wounds (6 mm diam.) were filled with collagen plaster alone or soaked with CMDBS. CMDBS K in collagen plaster was able to induce a remarkable effect both on the kinetics and on the quality of the restored skin. These results suggest that endogenous growth factors naturally released during the regeneration process could be trapped, protected and released by CMDBS. Taking note of the ubiquitous distribution of FGFs and their ability to stimulate a wide range of target cells, the authors have looked at the effect of CMDBS K in a calvarian bone defect healing. Adult rats were trephined (3 mm diam.) and healing of their defects were studied after 21 days. Only those treated with CMDBS show significant new bone formation and filling of defects. In conclusion, biopolymers could be designed to mimic some of the mechanisms regulating the bioavailability of growth factors and hence be used as wound healing agents.

CC 63-5 (Pharmaceuticals)

ST biopolymer wound healing promoter; dextran deriv wound healing promoter

IT **Wound healing promoters**
(biopolymers as wound healing promoters)

IT Biopolymers
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biopolymers as wound healing promoters)

IT Collagens, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(collagen plaster as carrier for wound healing promoters)

IT Bone, disease
(defect, biopolymers as wound healing promoters)

IT **9004-54-0D**, Dextran, derivs. 9044-05-7D, derivs.
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(biopolymers as wound healing promoters)

L37 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:452433 HCAPLUS
DOCUMENT NUMBER: 122:204880
TITLE: Derivatized dextrans (CMDBS) as promoters of bone healing. Factors influencing their effectiveness
AUTHOR(S): Lafont, J.; Baroukh, B.; Meddahi, A.; Caruelle, J.P.; Barritault, D.; Saffar, J.L.
CORPORATE SOURCE: Faculte de Chirurgie Dentaire, Universite Paris-V, Montrouge, 92120, Fr.
SOURCE: Cells and Materials (1994), 4(3), 219-30
CODEN: CEMAEE; ISSN: 1051-6794
PUBLISHER: Scanning Microscopy International
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Like heparin, carboxymethyl benzylamide sulfonate dextrans (CMDBS) are agents protecting heparin-binding growth factors from heat and proteolytic

denaturation, and enhancing their interactions with their receptors. In the present study we used in a craniotomy model a series of CMDBS (AM6, AM4, EM5) with different substitution rations in their chem. active groups, to test their potential as promoters of bone repair. They were matched against dextran, dextran sulfate and sucrose octasulfate, another functional heparin analog. AM6, prepd. from a 40 kD dextran and contg. a high percentage of sulfonated groups, was the most effective ($p < 0.002$ vs. controls). Sucrose octasulfate had also osteoconductive properties ($p < 0.002$ vs. controls), but fewer than AM6 ($p = 0.004$). The other agents had no effect on bone repair. We also tested the role of the injury during surgery of the mid sagittal sinus, which provides the main cranial blood supply. This prevented bone formation with AM6 ($p < 0.001$ vs. the corresponding vessel-preserved group). In conclusion, CMDBS effectiveness depends on their mol. wt., the presence of sulfonated groups and a proper vascular environment.

CC 1-10 (Pharmacology)

ST dextran deriv promoter bone healing

IT Blood vessel
Bone
Molecular structure-biological activity relationship
**Wound healing**
(derivatized dextrans (CMDBS) as promoters of bone healing: factors influencing effectiveness)

IT **9004-54-0D**, Dextran, Carboxymethyl benzylamide sulfonate derivs.
9042-14-2, Dextran sulfate 57680-56-5, Sucrose octasulfate
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(derivatized dextrans (CMDBS) as promoters of bone healing: factors influencing effectiveness)

L37 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:87717 HCAPLUS
DOCUMENT NUMBER: 118:87717
TITLE: Methods and compositions based on inhibition of cell invasion and fibrosis by anionic polymers
INVENTOR(S): Roufa, Dikla; Harel, Adrian; Frederickson, Robert C. A.
PATENT ASSIGNEE(S): Gliatech, Inc., USA
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9221354 | A1 | 19921210 | WO 1992-US4474 | 19920529 |
| W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD, US | | | | |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG | | | | |
| US 5605938 | A | 19970225 | US 1991-708660 | 19910531 |
| CA 2110291 | AA | 19921210 | CA 1992-2110291 | 19920529 |
| AU 9221469 | A1 | 19930108 | AU 1992-21469 | 19920529 |
| AU 671256 | B2 | 19960822 | | |

| | | | | |
|---|---|---|---|---|
| EP 586535 | A1 | 19940316 | EP 1992-912450 | 19920529 |
| EP 586535 | B1 | 20001122 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE | | | | |
| JP 06508356 | T2 | 19940922 | JP 1992-500552 | 19920529 |
| BR 9206077 | A | 19941115 | BR 1992-6077 | 19920529 |
| HU 66427 | A2 | 19941128 | HU 1993-3389 | 19920529 |
| EP 1027893 | A2 | 20000816 | EP 2000-201292 | 19920529 |
| EP 1027893 | A3 | 20030102 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC | | | | |
| EP 1038528 | A1 | 20000927 | EP 2000-201293 | 19920529 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC | | | | |
| JP 2000312715 | A2 | 20001114 | JP 2000-124553 | 19920529 |
| AT 197673 | E | 20001215 | AT 1992-912450 | 19920529 |
| ES 2151887 | T3 | 20010116 | ES 1992-912450 | 19920529 |
| JP 2002138039 | A2 | 20020514 | JP 2001-278340 | 19920529 |
| JP 2002138040 | A2 | 20020514 | JP 2001-278399 | 19920529 |
| JP 2002154973 | A2 | 20020528 | JP 2001-278271 | 19920529 |
| JP 2002154972 | A2 | 20020528 | JP 2001-278310 | 19920529 |
| JP 3379757 | B2 | 20030224 | JP 1993-500552 | 19920529 |
| NO 9304319 | A | 19940111 | NO 1993-4319 | 19931129 |
| US 5705177 | A | 19980106 | US 1994-150185 | 19940726 |
| US 5994325 | A | 19991130 | US 1995-470092 | 19950606 |
| US 6020326 | A | 20000201 | US 1995-469560 | 19950606 |
| US 6083930 | A | 20000704 | US 1995-471990 | 19950606 |
| US 6127348 | A | 20001003 | US 1999-388825 | 19990901 |
| US 6417173 | B1 | 20020709 | US 1999-476158 | 19991230 |
| US 2003069205 | A1 | 20030410 | US 2002-138705 | 20020506 |

| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | US 1991-708660 | A2 | 19910531 |
| | EP 1992-912450 | A3 | 19920529 |
| | JP 1993-500552 | A3 | 19920529 |
| | WO 1992-US4474 | A | 19920529 |
| | US 1995-469560 | A3 | 19950606 |
| | US 1999-388825 | A1 | 19990901 |
| | US 1999-476158 | A1 | 19991230 |

AB Biocompatible anionic polymers, such as dextran sulfate, inhibit fibrosis, scar formation assocd. with surgery. A laminectomy was performed in rats, rabbits, and dogs and a test agent contg. dextran sulfate (mol. wt. 40kDa), Gelfoam powder, and phosphate-buffered saline, was applied. In all animals, the skin incision and the underlying fascia and paraspinal muscles healed well.

IC ICM A61K031-725
ICS A61K009-00; C07K003-00; C07K017-00; C08B037-00

CC 63-8 (Pharmaceuticals)

ST wound healing agent anionic polymer; dextran sulfate fibrosis scar inhibition

IT Barnacle
Oyster
(adhesive proteins from, fibrosis and scar formation inhibition by dextran sulfate and)

IT Infection
(bacterial, glial cell invasion from, inhibition of, dextran sulfate for)

IT **Wound healing promoters**
(dextran sulfate for, fibrosis inhibition in relation to)

IT Collagens, biological studies
Fibrins
RL: BIOL (Biological study)

(fibrosis and scar formation inhibition by dextran sulfate and)
IT Surgery
(glial cell invasion from, inhibition of, dextran sulfate for)
IT Bone
(growth of, inhibition of, dextran sulfate for)
IT Virus, animal
(infection with, glial cell invasion from, inhibition of, dextran sulfate for)
IT Fibrosis
Granulation tissue
Keloid
(inhibition of, dextran sulfate and adhesive proteins for)
IT Neuroglia
(invasion of, after trauma, inhibition of, dextran sulfate for)
IT Laminectomy
(lesion from, fibrosis inhibition in, dextran sulfate and adhesive proteins for)
IT Abdomen
Blood vessel
Heart
Joint, anatomical
Oviduct
Peritoneum
Tendon
(surgery of, lesion from, fibrosis inhibition in, dextran sulfate and adhesive proteins for)
IT Proteins, specific or class
RL: BIOL (Biological study)
(MAP (mussel adhesive protein), fibrosis and scar formation inhibition by dextran sulfate and)
IT Proteins, specific or class
RL: BIOL (Biological study)
(adhesive, fibrosis and scar formation inhibition by dextran sulfate and)
IT Hip
(artificial, anionic polymers in, for fibrosis inhibition)
IT Peritoneum
(artificial, drainage tubes contg. anionic polymers in, for fibrosis inhibition)
IT Neuroglia
(astroglia, invasion of, after trauma, inhibition of, dextran sulfate for)
IT Nerve
(axon, outgrowth, inhibition of, dextran sulfate for)
IT Animal metabolism
(disorder, glial cell invasion in, inhibition of, dextran sulfate for)
IT Neoplasm inhibitors
(glioma, dextran sulfate as)
IT Prosthetic materials and Prosthetics
(implants, anionic polymers in, for fibrosis inhibition)
IT Nerve, neoplasm
(inhibitors, dextran sulfate as)
IT Neuroglia
(neoplasm, inhibitors, dextran sulfate as)
IT Kidney
(nephrostomy, tubes contg. anionic polymers in, for fibrosis inhibition)

IT Neoplasm inhibitors
(nerve, dextran sulfate as)
IT Neoplasm inhibitors
(neuroma, dextran sulfate as)
IT Nerve, neoplasm
(neuroma, inhibitors, dextran sulfate as)
IT Body, anatomical
(pelvis, disease, adhesion, surgery of, lesion from, fibrosis inhibition in, dextran sulfate and adhesive proteins for)
IT Nerve
(peripheral, repair prosthesis for, anionic polymers in, for fibrosis inhibition)
IT Pentosans
RL: BIOL (Biological study)
(sulfates, fibrosis and scar formation inhibition by)
IT Joint, anatomical
(temporomandibular, disease, surgery of, lesion from, fibrosis inhibition in, dextran sulfate and adhesive proteins for)
IT Lymphatic system
(thoracic duct, surgery of, lesion from, fibrosis inhibition in, dextran sulfate and adhesive proteins for)
IT Injury
(trauma, lesion from, fibrosis inhibition in, dextran sulfate and adhesive proteins for)
IT Heart
(valve, artificial, anionic polymers in, for fibrosis inhibition)
IT 9004-61-9, Hyaluronic acid 9005-32-7D, Alginic acid, derivs.
9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate
9042-14-2, Dextran sulfate 9050-30-0, Heparan sulfate 9056-36-4,
Keratan sulfate 24967-94-0, Dermatan sulfate
RL: USES (Uses)
(fibrosis and scar formation inhibition by)
IT **9004-54-0**, Dextran, biological studies
RL: BIOL (Biological study)
(fibrosis and scar formation inhibition by dextran **sulfate** and)
IT 9061-61-4, Nerve growth factor
RL: PROC (Process)
(inhibition of, dextran sulfate for)

L37 ANSWER 19 OF 27 MEDLINE on STN
AN 2003464473 MEDLINE
DN 22863696 PubMed ID: 12954797
TI Hepatocyte growth factor facilitates colonic mucosal repair in experimental ulcerative colitis in rats.
AU Tahara Yoshihiro; Ido Akio; Yamamoto Shojiro; Miyata Yoshifumi; Uto Hirofumi; Hori Takeshi; Hayashi Katsuhiro; Tsubouchi Hirohito
CS Department of Internal Medicine II, Miyazaki Medical College, Kiyotake, Japan.
SO JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, (2003 Oct) 307 (1) 146-51.
Journal code: 0376362. ISSN: 0022-3565.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Priority Journals
EM 200310
ED Entered STN: 20031008
Last Updated on STN: 20031024
Entered Medline: 20031023
AB Hepatocyte growth factor (HGF) modulates intestinal epithelial cell proliferation and migration, serving as a critical regulator of intestinal wound healing. In this study, we examined the effect of administration of recombinant human HGF on colonic mucosal damage in vivo. Acute colitis was induced in rats by feeding with 5% **dextran sulfate** sodium (DSS) for 7 days, and colitis was subsequently maintained by feeding with 1% DSS. On the 5th day of DSS administration, osmotic pumps releasing recombinant human HGF (200 microg/day) were implanted into the peritoneum of the rats. Continuous intraperitoneal delivery of HGF led to both increased serum human HGF levels and c-Met tyrosine phosphorylation within the colonic mucosa. Compared with mock-treated rats, those administered human HGF showed a reduction in colitis-associated weight loss, large intestinal shortening, and improved colonic erosions. Enhanced epithelial regeneration and cellular proliferation were observed in rats treated with recombinant human HGF. The weights of the liver, kidneys, and spleen were not affected by HGF administration. These results indicate that HGF administration accelerates colonic mucosal repair in rats with DSS-induced colitis and suggest that recombinant human HGF may be a useful therapeutic tool to facilitate intestinal wound healing in patients with ulcerative colitis.

L37 ANSWER 20 OF 27 MEDLINE on STN
AN 1999235252 MEDLINE
DN PubMed ID: 10219846
TI Keratinocyte growth factor ameliorates **dextran** sodium **sulfate** colitis in mice.
AU Egger B; Procaccino F; Sarosi I; Tolmos J; Buchler M W; Eysselein V E
CS Harbor-UCLA Medical Center, Division of Gastroenterology, Torrance, California 90502, USA.
SO Digestive diseases and sciences, (1999 Apr) 44 (4) 836-44.
Journal code: 7902782. ISSN: 0163-2116.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199905
ED Entered STN: 19990525
Last Updated on STN: 19990525
Entered Medline: 19990511
AB Keratinocyte growth factor (KGF) is emerging as an important mediator of mucosal defense and repair in the colon. The aim of the present study was to evaluate and further characterize the effects of exogenous KGF administration utilizing the **dextran** sodium **sulfate** (DSS) model of colitis in mice. Colitis was induced via oral administration of DSS (5 g/100 ml) to Balb/c mice for eight days. Intraperitoneal administration of KGF (5 mg/kg, once daily) or vehicle (VEH) was initiated 1 hr prior to the induction of the colitis (N = 10, each group). Mucosal injury of the entire colon was histologically assessed and graded. An approximately fourfold reduction in the crypt damage score was noted in the KGF group when compared to controls (VEH) (2.8 +/- 1.03 and 11.4 +/- 0.78, respectively). The significant reduction

of mucosal injury in KGF treated mice confirms that KGF is a key mediator maintaining the integrity of the colonic mucosa.

L37 ANSWER 21 OF 27 MEDLINE on STN
AN 95231854 MEDLINE
DN 95231854 PubMed ID: 7536320
TI CMDBS, functional analogue of heparin sulfate as a new class of corneal ulcer healing agents.
AU Fredj-Reygrobellet D; Hristova D L; Ettaiche M; Meddahi A; Jozefonwicz J; Barritault D
CS School of Medicine, Nice, France.
SO OPHTHALMIC RESEARCH, (1994) 26 (6) 325-31.
Journal code: 0267442. ISSN: 0030-3747.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199505
ED Entered STN: 19950524
Last Updated on STN: 19960129
Entered Medline: 19950518
AB Soluble **dextran** polymer **derivatives** (CMDBSs) are originally synthesized as heparin-like plasma substitutes. Some of them mimic heparin in its interactions and stabilize, protect and facilitate actions of heparin binding growth factors. The wound healing activity of one specific CMDBS was studied in a model of corneal ulcer on the rabbit eye and compared with the activity of basic fibroblast growth factors (bFGF) added alone or in association with CMDBS. Total reepithelization was observed with bFGF + CMDBS, bFGF alone and CMDBS alone after, respectively, 3.8 +/- 0.78, 4.3 +/- 0.67 and 4.4 +/- 0.51 days. All treatments were efficient if compared with eyes treated with saline ($p < 0.0001$). The grade of significance of the applied treatments was as follows: bFGF + CMDBS > bFGF > CMDBS > saline. Our study pinpoints that some specific CMDBS are as potent agents as bFGF for corneal ulcer healing, and can therefore be proposed for therapeutic use.

L37 ANSWER 22 OF 27 EMBASE 
on STN
AN 2002448444 EMBASE
TI Production and mass transfer characteristics of non-Newtonian biopolymers for biomedical applications.
AU Richard A.; Margaritis A.
CS Dr. A. Margaritis, Department of Chemical Engineering, University of Western Ontario, London, Ont. N6A 5B9, Canada. amarg@uwo.ca
SO Critical Reviews in Biotechnology, (2002) 22/4 (355-374).
Refs: 63
ISSN: 0738-8551 CODEN: CRBTE5
CY United States
DT Journal; General Review
FS 030 Pharmacology
037 Drug Literature Index
LA English
SL English
AB The market for microbial biopolymers is currently expanding to include several emerging biomedical applications. Specifically, these applications are drug delivery and wound healing. A fundamental understanding of the key fermentation parameters is necessary in order to optimize the

production of these biopolymers. Considering that most microbial biopolymer systems exhibit non-Newtonian rheology, oxygen mass transfer can be an important parameter to optimize and control. In this article, we present a critical review of recent advances in rheological and mass transfer characteristics of selected biopolymers of commercial interest in biomedical applications.

L37 ANSWER 23 OF 27 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2000276434 EMBASE
TI Low-molecular weight heparin as prophylaxis against thromboembolism after total hip replacement - Is it worth the price?.
AU Persson B.M.
CS B.M. Persson, Department of Orthopedics, Lund University Hospital, SE-221 85 Lund, Sweden
SO Acta Orthopaedica Scandinavica, (2000) 71/2 (215-216).
Refs: 8
ISSN: 0001-6470 CODEN: AOSAAK
CY Norway
DT Journal; Letter
FS 025 Hematology
037 Drug Literature Index
033 Orthopedic Surgery
027 Biophysics, Bioengineering and Medical Instrumentation
036 Health Policy, Economics and Management
038 Adverse Reactions Titles
LA English

L37 ANSWER 24 OF 27 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 1999389127 EMBASE
TI Stimulation of wound healing by positively charged dextran beads depends upon clustering of beads and cells in close proximity to the wound.
AU Tawil N.J.; Connors D.; Gies D.; Bennett S.; Gruskin E.; Mustoe T.
CS Dr. T. Mustoe, Division of Plastic Surgery, Northwestern Univ. Sch. of Medicine, 707 North Fairbanks Court, Chicago, IL 60611-3042, United States
SO Wound Repair and Regeneration, (1999) 7/5 (389-399).
Refs: 31
ISSN: 1067-1927 CODEN: WREREU
CY United States
DT Journal; Article
FS 005 General Pathology and Pathological Anatomy
009 Surgery
037 Drug Literature Index
LA English
SL English
AB We have previously shown that positively charged dextran (DEAE A25) increases wound breaking strength in linear incisions in rats and nonhuman primates at days 10-14 postwounding. In this article, we examined the cellular responses to different types of charged dextran beads (DEAE A50 and Cytodex-1) in culture studies and in rat incisional wounds. We show that Cytodex 1 and DEAE A50 beads also increased wound breaking strength in a rat linear incisional model. However, the increase was approximately 30-40% less than that observed in wounds treated with DEAE A25 beads. The main distinction between the three types of beads was the presence of bead clusters observed in tissue sections. Wounds treated with DEAE A25 beads formed distinct clusters while both Cytodex 1 and DEAE A50 beads clustered

to a lesser extent or failed to cluster at all. We propose that the different types of charged dextran beads improve healing by promoting cell adhesion and encouraging proliferation in close proximity to the wound. We also hypothesize that the 30-40% improvement in wound breaking strength seen with DEAE A25 beads compared to other types of charged dextran beads (DEAE A50 and Cytodex-1) originates from the unique characteristic of DEAE A25 beads in forming cell-bead aggregates adjacent to the wounded area. This clustering, in turn, affects the distribution of cells infiltrating the wounded area (such as macrophages) during the healing process and, as a consequence, alters the distribution of matrix molecules and growth factors secreted by these cells.

L37 ANSWER 25 OF 27 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 95141947 EMBASE
DN 1995141947
TI CM101, a polysaccharide antitumor agent, does not inhibit wound healing in murine models.
AU Quinn T.E.; Thurman G.B.; Sundell A.-K.; Zhang M.; Hellerqvist C.G.
CS Department of Biochemistry, School of Medicine, Vanderbilt University,Nashville, TN 37232-0146, United States
SO Journal of Cancer Research and Clinical Oncology, (1995) 121/4 (253-256). ISSN: 0171-5216 CODEN: JCROD7
CY Germany
DT Journal; Article
FS 016 Cancer
018 Cardiovascular Diseases and Cardiovascular Surgery
030 Pharmacology
037 Drug Literature Index
LA English
SL English
AB CM101 previously called GBS toxin), a new anticancer polysaccharide that induces inflammatory reactions in neovasculature of tumors; does not cause similar reactions in neovasculature of healing wounds. It appears that treatment with CM101 will not interfere with normal wound healing in cancer patients.

L37 ANSWER 26 OF 27 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 94264379 EMBASE
DN 1994264379
TI Efficacy of intraperitoneal sodium carboxymethylcellulose in preventing postoperative adhesion formation.
AU Heidrick G.W.; Pippitt Jr. C.H.; Morgan M.A.; Thurnau G.R.
CS Department of Obstetrics/Gynecology, Irvine Medical Center, University of California, 101 The City Drive,Orange, CA 92668, United States
SO Journal of Reproductive Medicine for the Obstetrician and Gynecologist, (1994) 39/8 (575-578). ISSN: 0024-7758 CODEN: JRPMAP
CY United States
DT Journal; Article
FS 009 Surgery
010 Obstetrics and Gynecology
037 Drug Literature Index
LA English
SL English
AB Various regimens to reduce postoperative intraperitoneal adhesion

formation have been tested; however, none has been consistently successful. The purpose of this study was to compare the efficacy of three compounds instilled into the peritoneal cavity-32% dextran 70, 0.9% normal saline and sodium carboxymethylcellulose-to no therapy on their ability to prevent postoperative adhesion formation in the New Zealand white rabbit. Bilateral posterior uterine horn incisions and cecal and transverse colon abrasions were performed during a two-phased study on each of 25 rabbits that were randomly assigned in a blind fashion into one of four study groups. Two weeks postoperatively, each rabbit underwent an autopsy to assess the magnitude of intraperitoneal adhesion formation. Adhesion scores were determined by counting the number of adhesions and assigning one or two points for each thin, filmy or dense, broad adhesion. As compared to no therapy, all three substances tested significantly reduced adhesion formation. Although 32% dextran 70 and 0.9% normal saline showed similar results, the degree of adhesion formation was reduced most significantly with sodium carboxymethylcellulose ($P < .002$) Sodium carboxymethylcellulose is effective in preventing postoperative adhesion formation in the New Zealand white rabbit.

L37 ANSWER 27 OF 27 EMBASE  on STN
AN 92086286 EMBASE
DN 1992086286
TI Healing of partial thickness porcine skin wounds in a liquid environment.
AU Breuing K.; Eriksson E.; Liu P.; Miller D.R.
CS Brigham/Children's Division of Plastic Surgery of Harvard Medical School, Brigham and Women's Hospital, Boston, MA 02115, United States
SO Journal of Surgical Research, (1992) 52/1 (50-58).
ISSN: 0022-4804 CODEN: JSGRA2
CY United States
DT Journal; Article
FS 009 Surgery
037 Drug Literature Index
LA English
SL English
AB This study employs a liquid-tight vinyl chamber for the topical fluid-phase treatment of experimental wounds in pigs. Continuous treatment with normal saline significantly reduced the early progression of tissue destruction in partial thickness burns. Uncovered burns formed a deep layer of necrosis (0.49 .+-. 0.004 mm, mean .+-. SD) although burn wounds covered with empty chambers demonstrated less necrosis (0.14 .+-. 0.01 mm), fluid-treated wounds formed no eschar, and little tissue necrosis could be detected (<0.005 mm). Topical treatment with hypertonic dextran increased water flux across burn wounds by 0.24 ml/cm2/24 hr (mean, n = 95) over saline-treated wounds during the first 5 days after wounding. When partial thickness burn and excisional wounds were immersed in isotonic saline until healed, the daily efflux of water, protein, electrolytes, and glucose across the wound surface declined during healing to baseline values found in controls (saline-covered unwounded skin). The declining protein permeability was used as a reproducible, non-invasive, endogenous marker for the return of epithelial barrier function. Saline-treated excisional wounds healed within 8.6 .+-. 0.6 days (mean .+-. SD, n = 27) and burn wounds within 12.1 .+-. 1.4 days (mean .+-. SD, n = 15). Healing of fluid-treated wounds occurred without tissue maceration and showed less inflammation and less scar formation than healing of air exposed wounds (no attempt was made to compare rates of healing between air- and fluid-exposed wounds). We consider the

fluid-filled chamber a potentially very useful diagnostic, monitoring, and delivery system for wound-healing research and for human wound therapy.